

Customer No.: 31561  
Application No.: 10/707,632  
Docket No.: 12398-US-PA

**In The Claims:**

**Claims 1-6 (canceled)**

**Claim 7 (currently amended) A method of fabricating a semiconductor device, comprising the steps of:**

**providing a substrate having at least a film layer, an optical isolation layer, an anti-reflection coating and a photoresist layer sequentially formed thereon;**

**performing a photolithographic process to pattern the photoresist layer so that a portion of the anti-reflection coating is exposed; and**

**patterning the anti-reflection coating, the optical isolation layer and the film layer using the patterned photoresist layer as a mask to form an opening in the film layer.**

**Claim 8 (currently amended) The method of claim 7, wherein the step for patterning the anti-reflection coating, the optical isolation layer and the film layer comprises performing an etching operation using the patterned photoresist layer as a mask in which the film layer has an etching rate much greater than the optical isolation layer.**

**Claim 9 (original) The method of claim 8, wherein the patterned photoresist layer and the patterned anti-reflection coating are also removed in the etching process.**

**Claim 10 (original) The method of claim 7 or 8, wherein after forming the opening, the method further comprises:**

**removing the patterned photoresist layer and the anti-reflection coating;**

Customer No.: 31561  
Application No.: 10/707,632  
Docket No.: 12398-US-PA

**forming a material layer over the substrate covering the optical isolation layer and completely filling the opening; and**

**performing a chemical-mechanical polishing operation using the optical isolation layer as a polishing stop layer to remove the material layer over the optical isolation layer.**

**Claims 11-13 (canceled)**

**Claim 14 (new) The method of claim 7, wherein the step for patterning the anti-reflection coating, the optical isolation layer and the film layer comprises:**

**patterning the anti-reflection coating and the optical isolation layer using the patterned photoresist layer as a mask;**

**removing the patterned photoresist layer and the patterned anti-reflection coating; and**

**performing an etching operation using the optical isolation layer as an etching mask to form an opening in the film layer.**

**Claim 15 (new) The method of claim 14, wherein after forming the opening, the method further comprises:**

**forming a material layer over the substrate covering the optical isolation layer and completely filling the opening; and**

**performing a chemical-mechanical polishing operation using the optical isolation layer as a polishing stop layer to remove the material layer over the optical isolation layer.**

Customer No.: 31561  
Application No.: 10/707,632  
Docket No.: 12398-US-PA

**Claim 16 (new) The method of claim 14, wherein the film layer has an etching rate greater than that of the optical isolation layer in the etching operation.**

**Page 5**

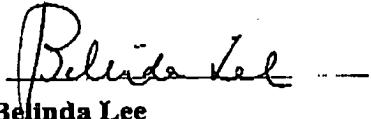
Customer No.: 31561  
Application No.: 10/707,632  
Docket No.: 12398-US-PA

**No fee is believed to be due in connection with the filing of this paper.**

**Respectfully submitted,**

Date :

Oct. 28, 2004

  
Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office  
7<sup>th</sup> Floor-1, No. 100  
Roosevelt Road, Section 2  
Taipei, 100  
Taiwan  
Tel: 011-886-2-2369-2800  
Fax: 011-886-2-2369-7233  
Email: [belinda@jcipgroup.com.tw](mailto:belinda@jcipgroup.com.tw)  
[Usa@jcipgroup.com.tw](mailto:Usa@jcipgroup.com.tw)

**Page 6**